ABSTRACT

An apparatus and method for monitoring a large number of binding interactions and obtaining data related to the interactions. In accordance with the illustrative embodiment, the apparatus includes an IR sensor, a sliding separator, and IR-transmitting fibers that are optically coupled, at a first end thereof, to the sensor. The sliding separator adjusts the spacing between fibers as is required for interfacing the second end of the fibers with any of a variety of sample carriers. The second end of the fibers capture chemical entities form the sample carriers. The chemical entities at the end of the fibers are then contacted with a binding compound. If binding activity occurs, a thermal signal indicative thereof will be transmitted through the fiber to the sensor.